Minnesota Immunization Practices Advisory Committee (MIPAC)

April 19th, 2016
## Today’s Agenda

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<td>12:00-12:05</td>
<td>Welcome and Introductions</td>
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<td>12:05-12:10</td>
<td>MDH Bulletin Updates</td>
<td>Margo Roddy</td>
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<td>12:10-12:20</td>
<td>ACIP Meeting</td>
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<td>12:20-12:30</td>
<td>Exemption Bill</td>
<td>Diane Peterson</td>
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<td>Emily Banerjee</td>
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<td>12:40-12:50</td>
<td>Somali Community Forums</td>
<td>Lynn Bahta</td>
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<td>12:50-1:00</td>
<td>Key Messages</td>
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MDH Bulletin
Updates

Margo Roddy
Section Manager, Vaccine Preventable Disease
Minnesota Department of Health
ACIP Meeting Synopsis

FEBRUARY 2016
HPV Vaccines

- 9vHPV received approval for license expansion in males 15-26
  - Merck is planning to retire 4vHPV by the end of 2016
- Discussion continues regarding 2 versus 3 dose schedule for HPV vaccines
  - WHO changed their HPV vaccination recommendation:
    - 2 doses, at least 6 months apart
    - Girls age 9-14 years
    - A 3-dose schedule is still recommended for persons 15-26 years and for immunocompromised and/or HIV-infected
Summary of data presented to ACIP June 2015

- Antibody response non-inferior in 2-dose groups (and generally higher) for both 2vHPV and 4vHPV vaccines
- Antibody kinetics similar
- Consistent in all trials (5 evaluated 0.6 months; 1 evaluated 0.12 months)

Clinical trial data for 9vHPV vaccine

From ACIP Meeting, February 2016:
http://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2016-02/hpv-03-luxembourg.pdf
Clinical trial data for 9vHPV vaccine

From ACIP Meeting, February 2016:
http://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2016-02/hpv-03-luxembourg.pdf
Merck is anticipating submitting a BLA for a 9vHPV vaccine 2-dose schedule

- Immuno-bridging study underway
- Study for antibody persistence and immune memory will follow

Further information is needed before ACIP votes on a 2-dose recommendation
Vaccine efficacy, early season: 59%! Specifically, for AH1N1-51% and B-76%.

*Quadrivalent recombinant influenza vaccine (RIV4) study results* presented –

- Antigen content is 3X higher compared to standard formula
- In persons 50 years and older, it showed superior response to H3N2, and reduced attack rates of influenza in a mismatched year compared to regular formulation
The following are recommended:

- All patients with egg allergy of any severity, including anaphylaxis, should receive IIV annually, using any age-approved brand of IIV in an age-appropriate dose.
- Such patients can receive the vaccine as a single dose without prior vaccine skin testing.
- Either egg-based or egg-free IIV can be used.
- Special precautions regarding medical setting are not warranted.
- Language that describes egg-allergic recipients as being at increased risk compared or requiring special precautions should be removed from guidelines and product labeling.

Ann Allergy Asthma Immunol 111 (2013) 298e305

https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Practice%20Resources/Update-on-influenza-vaccination-of-egg-allergic-patients-2014.pdf
2016-17 Influenza Vaccine Recommendations

- Risk of anaphylaxis due to egg allergy small compared to risk of hospitalization and death due to influenza

- *2016-17 Flu recommendations*: change in egg allergy language
  - ACIP voted to remove the egg allergy algorithm
    - Person with egg allergies should receive influenza vaccine, including LAIV
    - Persons who have previously experienced a severe anaphylactic reaction to eggs should be vaccinated by their primary care provider/clinic
Meningococcal, serogroup B

- Brief updates on safety and effectiveness were presented.
- Re-evaluation of risk of meningococcal disease among HIV-positive persons supports adding HIV+ as a risk factor for meningococcal vaccination.
  - The data is less compelling and complicated for men who have sex with men (MSM).
- Breaking news: Trumenba was just approved for a 2-dose schedule at 0, 6 intervals.
Japanese Encephalitis

- Information on duration of protection and consideration for a booster dose following the primary series reviewed
  - Booster dose currently not FDA-approved
- ACIP felt that the data were insufficient to make a universal booster dose recommendation but did vote to add language to allow for case-based recommendations by the clinician and based on patient’s risk of exposure
Data were presented on a newer formulation (Paxvax) of an older vaccine product.

- Efficacy was 80% 3 months following vaccination.

Reviewed G.R.A.D.E. evidence on whether cholera vaccine should be recommended to prevent cholera in persons traveling to cholera endemic regions.

- Evidence support a safe and effective vaccine.
- Evidence supports a universal recommendation.
- Additional components for a recommendations are pending – for whom it would be recommended, booster dose need, special groups.
ZIKA Virus Vaccine Update 
(as of February 2016)

- The National Vaccine Program Office is responding to this emerging infection - multi-agency, multi-industry response
- Vaccine considerations are at the conceptual level of development
ACIP SLIDES CAN BE FOUND AT:

http://www.cdc.gov/vaccines/acip/meetings/slides-2016-02.html
Update on Legislation re Vaccination Exemptions for Children

Diane C. Peterson
Minnesota Childhood Immunization Coalition

April 19, 2016
Exemptions Permitted to School and Childcare Immunization Requirements

April 2016

Type of Exemptions Permitted

- Medical, Religious, Personal Belief
- Medical, Religious
- Medical, Personal Belief
- Medical Only

1 Arizona: Personal belief exemption permitted for school only
2 Missouri: Personal belief exemption permitted for childcare only
3 Virginia: Personal belief exemption permitted for HPV only
States with legislation pertaining to non-medical exemptions in 2016

- **Relax/Add PBE**
- **Strengthen/Eliminate non-medical exemption**
- **Both**
Authors: Representative Mike Freiberg (HF 393) and Senator Chris Eaton (SF 380)

The bill proposes:

- In order to obtain an exemption based on “personal beliefs,” the parent/guardian must submit a certificate of exemption, signed by a physician*, and using a form developed by MDH.

- The certificate would expire at the end of grade 6. A new certificate would be required for entry to grade 7, if still desired.
The exemption certificate must contain:

- Specific vaccine(s) for which exemption is requested and explanation of reasons for request.
- Statement from a physician, physician assistant, or advanced practice registered nurse that the parent or guardian has received information about the risks and benefits of the vaccines, consistent with information from CDC.
- An acknowledgement that the child may be prohibited from attending school or childcare facility during an outbreak for which the child has not been vaccinated.
Current Status of Immunization Bill

- SF 380 passed the Senate committee in 2015
- HF 393 did not get a hearing in the House committee
- Decision made to focus on awareness activities
- MnCIC held “Day on the Hill” on March 29, 2016
- Distributed packet of information that contained . . .
Joint letter affirming value of immunization signed by 23 major Minnesota groups

- Assoc of Mn Cos
- APIC-Mn
- CDF-MN
- Children’s MN
- IAC
- IDSA
- LPHA
- March of Dimes
- Mayo Clinic
- MAFP
- MAPA
- MAPRN Coalition
- MnAAP
- NAPNAP-MN
- Mn Child Care Association
- MnCIC
- Mn Council of Health Plans
- MHA
- MMA
- MPhA
- MPHA
- SNOM

March 29, 2016

Dear Legislator:

We, the undersigned, jointly affirm the value, safety, and effectiveness of vaccines in preventing serious illness and saving lives. Immunization has been hailed one of the ten greatest achievements of the 20th century in improving the health and life expectancy of people living in the U.S. In order to advance the many successes that have been achieved through immunization, we believe that public policy decisions about vaccination should be based on criteria that will:

Reduce barriers to giving safe and effective vaccines

Barriers to vaccination often lead to lower community vaccination rates. Such barriers can arise as a result of lack of knowledge about vaccine indications and contraindications, logistical issues (e.g., access to immunization services), and missed opportunities (e.g., not giving all vaccinations that are due simultaneously).

Encourage adherence to evidence-based vaccine recommendations

Recommendations for the use of vaccines in the United States are determined by expert national committees such as the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention and the American Academy of Pediatrics Committee on Infectious Diseases. Their recommendations are based on the age at which the body’s immune system is capable of making an appropriate response to the vaccine, protecting children, adolescents, and adults before they are most at risk for these serious diseases, and the safety and efficacy of the vaccine. These evidence-based decisions have become the standard of care for physicians and other healthcare professionals throughout the country.

Support providing accurate, science-based immunization information

In today’s world, people can get immunization information from many sources other than their physician, such as over the Internet, in newspapers and magazines, as well as from friends and other social contacts. Although this plethora of information can help the public make more informed health decisions for their families, it can also be a source of misinformation. It is imperative that any information on vaccines and immunization communicated by our state’s leadership in all branches of state government (e.g., executive, legislative, and agency) be credible and consistent with that of the national scientific community.

By following these criteria, we aim to assure that no child or adult in Minnesota suffer needlessly from a disease that is preventable through immunization.

Association of Minnesota Counties • Association of Professionals in Infection Control – Minnesota Chapter
Children’s Defense Fund – Minnesota • Children’s (Hospitals and Clinics of) Minnesota
Immunization Action Coalition • Infectious Diseases Society of America • Local Public Health Association of Minnesota
March of Dimes, Minnesota Chapter • Mayo Clinic • Minnesota Academy of Family Physicians
Minnesota Academy of Physician Assistants • Minnesota Advanced Practice Registered Nurses Coalition
Minnesota Chapter of the American Academy of Pediatrics
Minnesota Chapter of the National Association of Pediatric Nurse Practitioners
Minnesota Child Care Association • Minnesota Childhood Immunization Coalition
Minnesota Council of Health Plans • Minnesota Hospital Association
Minnesota Medical Association • Minnesota Osteopathic Medical Society
Minnesota Pharmacists Association
Minnesota Public Health Association • School Nurses of Minnesota

Summary of opinion polls

How do adults feel about vaccinations for children?

Nationally

In February 2015 a CNN/ORC poll showed nearly 80% of 10 Americans believe parents should be required to vaccinate their healthy children against highly contagious, but preventable diseases such as measles, mumps, rubella, and polio. If parents choose not to vaccinate their children, poll respondents said, the child should not be allowed to attend public school or day care.¹

Other polls underscore this opinion. A 2015 Pew Research Center poll found that a majority of Americans say children should be required to get vaccinated. Overall, 68% of U.S. adults say childhood vaccines should be required.² This same poll found slightly more than 8 of 10 (83%) Americans believe that vaccines are safe for children. Only 9% thought vaccines were unsafe. Support for vaccines is overwhelming across political lines, as well—with 85 percent of Republicans and 87 percent of Democrats believing that vaccines are safe.³

More than 70 percent of Americans think schools should be able to suspend unvaccinated students during outbreaks of contagious diseases.⁴ And support for required vaccinations for school enrollment is increasing. According to a Harris Poll conducted in March 2015, 87 percent of adults surveyed feel that childhood vaccinations should be mandatory, an increase from 77% in July of 2014.⁵

In Minnesota

A majority of participants (81.1%) in the House of Representatives 2015 State Fair poll felt that parents (or guardians) who are contemplating opting their child out of being vaccinated for attendance in kindergarten through grade 12 should be required to first talk to a physician about their decision.⁶

¹ Poll: Majority of Americans want vaccines to be required as measles outbreak grows, Sandeep Lakovote, special to CNN, February 23, 2015. (see http://www.cnn.com/2015/02/23/health/vaccine-poll/)
² http://www.pollsresearch.org/fact-tank/2015/02/02/young-adults-more-likely-to-say-vaccinating-kids-should-be-a-parents-choice/
⁶ 2015 State Fair Poll Results, Public Information Services, Minnesota House of Representatives. (see http://www.house.leg.state.mn.us/hinfo/sppoll/15poll_results.pdf)
Thank you!!

- Diane Peterson, diane@immunize.org

- Minnesota Childhood Immunization Coalition
  - www.vaxmnkids.org

- Immunization Action Coalition
  - www.immunize.org
  - www.vaccineinformation.org
Mumps update

Minnesota Immunization Practices Advisory Committee Webinar
April 19, 2016
Emily Banerjee
Mumps Overview

- Vaccine preventable viral illness

- MMR vaccine: 2 doses routinely recommended at 12-15 months and 4-6 years

- Vaccine effectiveness mumps:
  - 78% (1 dose)
  - 88% (2 doses)

- Prodrome of low-grade fever, headache, fatigue, muscle aches, loss of appetite

- Parotitis occurs in 30-40% of cases, swelling is usually tender, unilateral or bilateral
Mumps Complications & Treatment

- Orchitis (testicular inflammation) in post-pubertal males (3-10%)
- Oophoritis (ovarian inflammation) in post-pubertal females (<1%)
- Post vaccine era: <1% experience:
  - Meningitis
  - Encephalitis
  - Deafness
  - Pancreatitis
- MMR & IG ineffective after exposure occurs
- Treatment is supportive.
Mumps Epidemiology

- Mumps is a low incidence disease in the U.S. but still considered endemic
- Spread directly through contact with infected droplets or saliva, more likely in densely populated settings where there is prolonged close contact or sharing of objects
- Occurs year-round, but peaks late winter and spring
- Surveillance challenged by:
  - Vague, nonspecific symptoms that mimic other diseases and conditions
  - Issues with lab testing
Number of Harvard Mumps Cases Rises to 22

By MENAKA V. NARAYANAN, CRIMSON STAFF WRITER a day ago

Six weeks after Harvard University Health Services Director Paul J. Barreira first alerted Harvard affiliates of two cases of mumps, the total number of cases has risen to 22, according to the Cambridge Public Health Dept.

The new number is an increase of six from the most recent fig according to HUHS Spokesperson Lindsey Baker. The virus has spread to nearby schools, including Boston University and Tufts University.

More mumps cases reported in Gallatin Co. GALLATIN COUNTY

By KTVM Staff

Purdue to offer free mumps vaccinations

S.C. DHEC: Coastal Carolina University exposed to mumps

Mumps case diagnosed in Shelby County

Published 7:59 PM CDT Apr 12, 2016

US News » Minnesota reports mumps increase

Case of mumps confirmed in North Carolina

Published: February 17, 2016 | Updated: February 17, 2016
Minnesota mumps cases 2016

- Minnesota has had 10 confirmed and 6 probable cases of mumps as of 4/19/2016
- Parotitis/symptom onset date range: 1/7 - 3/3
- All lab-confirmed cases are genotype G
- Age range: 16-53 years (median 34)
- Parotitis (11 bilateral, 4 unilateral)
- Orchitis in 2 of 16 cases
- Hospitalizations for 2 of 16 cases
- Vaccination status:
  - 2 doses (5)
  - 1 dose (1)
  - Undocumented/states vaccinated (6)
  - Unknown (4)
Mumps in MN and the U.S., 2000-2016

Mumps cases in MN, 2000-2016

Mumps cases in US, 2000-2016
Confirmed and probable cases by date of swelling onset, 2016

We assume no additional cases from these exposures on: April 22, 2016 (2 incubation periods after last case)
Media and communications

- Health Advisory sent Wednesday, February 10th
  - Consider mumps in patients with compatible symptoms
  - Call MDH to report suspect case
  - Collect and send specimens for lab testing
  - Advise exclusion if mumps is strongly suspected and there is no likely differential diagnosis

- Letter sent to health services directors with campus housing (UMN, MNSCU, private colleges) in March
  - Similar messages as in health advisory
  - Information about signing up to use MIIC if not using already
Challenges: mumps preparedness

- Increased mumps activity when outbreaks occurring in other Midwestern states
- Asymptomatic and sub-clinical transmission, difficult to confirm true mumps
- MN residents encouraged to know their vaccination status and be up-to-date with MMR vaccine
- Keep mumps from taking hold in exposure settings likely to facilitate transmission (e.g., schools, colleges, correctional facilities, congregate living facilities) or healthcare settings
Thank you!
Somali MMR Vaccine Hesitancy Updates
Comparison of MMR Rates at 24 Months in Children of Somali Descent versus Non Somali, 2004-2013, Minnesota

Immunization rates

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<tr>
<th>Year</th>
<th>Somali MMR</th>
<th>Non Somali MMR</th>
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<tr>
<td>2004</td>
<td>92%</td>
<td>88%</td>
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<tr>
<td>2005</td>
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<td>84%</td>
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Data derived from Minnesota Immunization Information Connection (MIIC), March 2016
Immunization Rates at 24 Months in Children of Somali Descent, 2004-2013, Minnesota

Data derived from Minnesota Immunization Information Connection (MIIC), March 2016
Comparison of Immunization Rates at 24 months among Children of Somali Descent versus Non-Somali, Minnesota, March 2016

Data derived from Minnesota Immunization Information Connection (MIIC), March 2016
Comparison of Selected Immunization Rates by 72 months in Children of Somali Descent versus Non-Somali, Minnesota, 2004-2008

Data derived from Minnesota Immunization Information Connection (MIIC), 2015
Activities update: Partnerships

- Somali Public Health Advisors meet quarterly - work plan included outreach to greater Minnesota communities
- LPH update spring 2015
- Collaborative project with MNAAP (December 2014)
- Presentation to MMA Public Health Committee (April 2015)
Activities update: Mitigation

- Collaborating on a project with CDC and Princeton to look the impact of a measles case within an Undervaccinated community - stay tuned
- Measles outbreak response reviewed with Local Public Health agencies
- Charter Schools: most schools with low rates are related administrative issues, not low immunization rates
- Child Care: focused efforts this year to provide technical assistance in order to receive require reports
Activities update: Training and Outreach

- Education outreach and training
  - Conducted 15 sessions on autism and VPD to parents in various settings
  - Training interpreters - St. Cloud, Mankato
  - Presentation at MNAAP’s Hot Topics last spring
  - Consultation with Local Public Health in the counties of Ramsey, Dakota, Hennepin, Blue Earth, Nicollet, Olmsted, Stearns, Rice
Activities update: Training and Outreach

- Planned and executed educational forums: April 13 - 16
  - Professional forum: metro
  - Community forum: Rochester, St. Cloud
  - Somali conference calls with Somali psychiatrist and an esteemed Imam (spiritual leader)

- GOALS:
  - Provide factual information from which parents can make informed decision
  - Improve the community’s knowledge about autism, especially identifying early signs of autism and acting swiftly to seek intervention
  - Build partnerships in greater Minnesota communities
Informational Forums: Community

- Planning included involvement from Somalis in the local community and Local Public Health
- Moderated by local Somali leaders
- Information was presented by Somali speakers and included child growth and development, autism and vaccine-preventable diseases
- Also included messages from the Community’s spiritual leader and parents with children diagnosed with ASD
- A mini resource fair occurred before each community forum
Informational Forums: Professional

- Included clinicians, clinical staff, Somali professionals and paraprofessionals
- Dr. Amy Hewitt (U of M) provided an update on surveillance activities occurring in MN
- Dr. Paul Carbone (a nationally recognized Developmental Specialist) provided an overview of ASD, current research, and evidence-based interventions that are being used
- Round table session generated ideas for next steps that agencies/clinics can take on and a success story from South Lake Pediatrics
“Take aways” from this broad effort

- The Somali Minnesotan community appreciated MDH’s efforts to reach out to greater MN communities
  - “Let’s not make this a one-time effort”
  - “We will invite you back to talk about what else can be done”
  - “If only we could have brought more people, we need this information.”
- Information in Somali by Somali experts was meaningful to the community
- MDH has brokered relationships within both the Rochester and the St. Cloud community that can facilitate ongoing outreach
Acknowledgements

- Michelle Dittrich, MPH, Logistics Coordinator
- Asli Ashkir, RN, MPH, Cultural and Content Coordinator
- Hindi Omar, Community Liaison Coordinator